

REMARKS

Claims 1-5, 8-15 and 17-25 are pending in this application. Claims 1, 11, and 17 are amended. Claims 6, 7 and 16 are cancelled. Claims 19-24 are withdrawn from consideration.

Claim 1 is amended to recite a method of tracking a user including “transmitting an overhead message including an indicator value” to at least one user of a group; and tracking movement of the at least one user of the group based on a tracking area registration update message received from the user that is enabled or disabled based on the indicator value.“ Independent claims 11, 17 and 25 recite features similar to the above-identified features of independent claim 1. Applicants respectfully submit that at least the above-emphasized features of independent claim 1 and the similar features of independent claims 11, 17 and 25 patentably distinguish over the cited references.

As described with respect to an example embodiment of the present invention in the Applicants’ specification at page 7, paragraph [0022] a “Tracking Area Update Enabled Indicator” (TAUEI) bit may be transmitted in the system overhead by each sector. For example, a network may disable tracking area updates by setting TAUEI to ‘0’ within the interior of a tracking area and enable tracking area updates in sectors on a boundary between two or more tracking areas by setting this bit to ‘1’. Further, a network may also use this bit to disable tracking area updates if it determines that the uplink is overloaded. Accordingly, the methods as recited in independent claims 1, 11, 17 and 25 may provide more efficient use of communication resources.

CLAIM REJECTION - 35 U.S.C. § 103

Claims 1, 2, 5, 8-12, 17 and 25 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Lin et al. (U.S. Publication No. 2004/0203756, herein Lin) in view of Lueng et al. (U.S. Publication No. 2003/0087653, herein Lueng).

The Examiner relies on page 2, paragraphs 23 and 24 of Lin as disclosing, teaching or suggesting the indicator value. Lin is directed to a multicast management mechanism for mobile networks that updates the location of a mobile station MS when it moves to a different location area LA.¹ The cited portion of Lin states the following:

[0023] Step 1: the MS 100 receives a location signal other than that of its original MSC 40.

[0024] Step 2: according to the location signal, the MS 100 sends a location update request to its new MSC 60. The MSC 60 receives the location update request message and sends a location area update message (MAP_UPDATE_LOCATION_AREA) to a VLR 70 connected to the MSC 60.

Accordingly, in Lin, a mobile station MS receives a location signal from a new mobile switching center MSC different from the mobile station's original mobile switching center MSC and in response sends a location update request message to the new mobile station switching center MSC.

However, Lin does not disclose, teach or suggest "transmitting an overhead message including an indicator value to at least one user of a group; and tracking movement of the at least one user of the group based on a tracking area registration update message received from the user that is enabled or disabled based on the indicator value." Because Lin does not disclose teach or suggest these features, Lin is not able to use communication resources as efficiently as the claimed invention. In particular, Lin does not disclose teach or suggest an

¹ Lin, page 1, paragraph [0017].

indicator value included in the overhead message that may be used to (1) disable tracking area updates when a user is within the interior of a tracking area; (2) enable tracking area updates in sectors on a boundary between two or more tracking areas; and (3) disable tracking area updates if it determines that the uplink is overloaded.

Applicants respectfully submit that Lueng fails to cure the deficiencies of Lin as described above with respect to the independent claims.

Lueng is directed to a method and apparatus for routing IP packets in a wireless communication system, wherein a broadcast or other point to multi-point service is provided intermittently. As described on page 1, paragraph [0009] of Lueng an intermittent broadcast is transmitted when a trigger is recognized to initiate service and is not transmitted when a termination trigger is recognized. Applicants respectfully note that triggering (i.e. causing a transmission) is not the same as enabling or disabling a transmission. For example, a transmission may be enabled (i.e. able to be sent) without actually ever being sent or triggered.

Accordingly, Applicants respectfully submit that Lueng also fails to disclose, teach or suggest a method including “transmitting an overhead message including an indicator value to at least one user of a group; and tracking movement of the at least one user of the group based on a tracking area registration update message received from the user that is enabled or disabled based on the indicator value.”

Further, Applicants respectfully maintain the argument previously submitted that even if Lueng did cure the deficiencies of Lin with respect to the features of the independent claims, the Examiner has not provided the required “convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references,” Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

On page 10, line 23 to page 11, line 2 of the Office Action mailed August 25, 2005 and page 13, line 22 to page 14, line 2 of the final Office Action mailed March 7, 2006, the Examiner states that the motivation is that the users can be identified by a unique identifier which is included in the addressing information.

However, Applicants are still unclear as to how “identifying the users by a unique identifier” would improve or have any effect on the method of tracking users as described in Lin, much less motivate one of ordinary skill in the art to modify the method of tracking users described in Lin to include a trigger as described in Lueng.

In light of the above, Applicants respectfully request that the rejections of claims 1, 2, 5, 8-12, 17 and 25 under 35 U.S.C. §103(a) be withdrawn.

Claims 3, 4, 13, 14, 15 and 18 stand rejected under 35 U.S.C. §103(a) as unpatentable over Lin in view of Lueng and further in view of Attar et al. (U.S. Publication No. 2004/0203979, herein Attar).

Attar is directed a method and apparatus for transmit power modulation in a wireless communication system that includes a transmitter, which receives an RF signal and produces at least two modulated signals based on the RF signal that may be used to receive channel quality indications from mobile units and schedule data transmissions to mobile units.

Applicants respectfully submit that Attar, like Lueng, fails to cure the deficiencies of Lin as described above with respect to the features of the independent claims.

Therefore, Applicants respectfully request that the rejection of claims 3, 4, 13, 14, 15 and 18 under 35 U.S.C. § 103(a) also be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of the pending claims of the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Scott A. Elchert at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By

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